

Title (en)

METHOD FOR INTERMITTENTLY CLEANING A FILTER, AND FILTER DEVICE FOR A METAL PRINTING DEVICE

Title (de)

VERFAHREN ZUR INTERMITTIERENDEN ABREINIGUNG EINES FILTERS SOWIE FILTEREINRICHTUNG FÜR EINE METALL-DRUCKEINRICHTUNG

Title (fr)

PROCÉDÉ DE NETTOYAGE INTERMITTENT D'UN FILTRE ET DISPOSITIF DE FILTRATION POUR UN DISPOSITIF D'IMPRESSION DE MÉTAL

Publication

EP 4065252 A1 20221005 (DE)

Application

EP 20808340 A 20201117

Priority

- DE 102019132349 A 20191128
- EP 2020082329 W 20201117

Abstract (en)

[origin: WO2021104927A1] The invention relates to a method for intermittently cleaning a filter (26) in a filter device (2), which filter device comprises a filter housing (18) and the filter (26) located therein. The filter housing (18) has a medium inlet (15) and a medium outlet (16) for a medium (7) to be filtered. Furthermore, during filter operation, the medium (7) flowing through the medium inlet (15) passes through the filter (26) and exits the filter device (2) via the medium outlet (16). The aim of the invention is to further improve a method of this type. To achieve this, according to the invention, in order to clean the filter (2), both the medium inlet (15) and the medium outlet (16) are closed and thereafter a negative pressure is produced in the filter housing (18) and a flushing medium (45), which impinges on the filter (26) in order to clear the filter, is sucked into the filter housing (18) by means of the negative pressure. The invention further relates to a method for operating a metal printing device (1) and to a filter device (2) for a metal printing device (1).

IPC 8 full level

B01D 46/00 (2022.01); **B01D 46/24** (2006.01); **B01D 46/48** (2006.01)

CPC (source: EP US)

B01D 29/66 (2013.01 - US); **B01D 46/0093** (2013.01 - EP); **B01D 46/2403** (2013.01 - EP); **B01D 46/48** (2013.01 - EP US);
B01D 46/69 (2022.01 - EP); **B01D 46/70** (2022.01 - EP US); **B01D 2273/28** (2013.01 - EP); **Y02P 10/25** (2015.11 - EP)

Citation (search report)

See references of WO 2021104927A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102019132349 A1 20210602; CN 114746164 A 20220712; EP 4065252 A1 20221005; US 2022362691 A1 20221117;
WO 2021104927 A1 20210603

DOCDB simple family (application)

DE 102019132349 A 20191128; CN 202080082544 A 20201117; EP 2020082329 W 20201117; EP 20808340 A 20201117;
US 202017770134 A 20201117